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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,470	12/12/2003	Sebastien Kerdiles	4717-9100	8821
28765	7590	05/03/2006	EXAMINER	
WINSTON & STRAWN LLP 1700 K STREET, N.W. WASHINGTON, DC 20006			NGUYEN, JIMMY	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/733,470	KERDILES ET AL.	
	Examiner	Art Unit	
	Jimmy Nguyen	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 - 36 is/are pending in the application.
- 4a) Of the above claim(s) 24 - 30 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-14, 17, 18 and 36 is/are allowed.
- 6) ☒ Claim(s) 1 - 6, 15, 16, 19 -23, 31-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **Response to Amendment**

The examiner acknowledges the amendment filed 1/23/2006, however upon further search the examiner makes new ground of rejection.

### ***Drawings***

The drawing filed 1/23/2006 has been accepted.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 6, 15, 16, 19 – 23, 31 - 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Omi et al (US 6,746,559).

**As to claim 1**, Omi et al disclose (fig 4) a tool for disuniting two wafers, with at least one of the wafers being used in fabricating substrates for microelectronics, optoelectronics, or optics, the tool comprising two gripper members (403, 404) for temporarily affixing to respective opposite faces of the wafers (401) that are united to each other, and a disuniting control device (410, 411) suitable for moving the members

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(403, 404) relative to each other, wherein the disuniting control device (410, 411) comprises an actuator device for positively displacing the gripper members (403, 404) away from each other sufficiently for inducing controlled flexing in at least one of the members to assist in disuniting the wafers.

**As to claim 2**, Omi et al disclose (fig 4) the tool according to claim 1, wherein one or each gripper member comprises a diaphragm having a plurality of orifices communicating on one side with a respective wafer face (401) and on the other side with a vacuum source (414).

**As to claim 3**, Omi et al disclose (fig 4) the tool according to claim 2, wherein the orifices are micropores.

**As to claim 4**, Omi et al disclose (fig 4) the tool according to claim 1, wherein one or each gripper member (403, 404) comprises an electrode which has a different potential compared to that of a respective wafer (401) face so as to provide temporary affixing by electrostatic forces.

**As to claim 5**, Omi et al disclose (fig 4) the tool according to claim 4, wherein each gripper member (403, 404) that includes an electrode further comprises dielectric material which surrounding the electrode.

**As to claim 6**, Omi et al disclose (fig 4) the tool according to claim 1, wherein the actuator device (410, 411) includes at least two actuators for acting on at least one gripper member (403, 404) at least two distinct locations.

**As to claim 15**, Omi et al disclose (fig 4) the tool according to claim 1, wherein at least one gripper member (403, 404) includes a member for limiting flexing.

**As to claim 16**, Omi et al disclose (fig 4) the tool according to claim 15, wherein the member for limiting flexing is adjustable.

**As to claim 19**, Omi et al disclose (fig 4) the tool according to claim 1, wherein the two gripper members (403, 404) are mounted to pivot relative to each other, and wherein the actuator device (410, 411) acts at a distance from the pivot region.

**As to claim 20**, Omi et al disclose (fig 4) the tool according to claim 19, including a device for adjusting the spacing between the gripper members (403, 404) so as to enable united wafers (401) of different total thicknesses to be disunited.

**As to claim 21**, Omi et al disclose (fig 4) the tool according to claim 1, wherein the actuator device (410, 411) comprises one or more hydraulic actuators.

**As to claim 22**, Omi et al disclose (fig 4) the tool according to claim 1, further comprising a device for measuring forces exerted by at least one of the actuators or spacing between the wafers.

**As to claim 23**, Omi et al disclose (fig 4) an assembly for disuniting a plurality of pairs of united wafers in series, the assembly comprising a plurality of tools according to claim 1, and a common actuator device (410, 411) engager for jointly displacing at least one gripper member of each tool relative to the other gripper member to simultaneously disunite the wafers.

**As to claims 31- 35**, Omi et al disclose (fig 4) the tool wherein each gripper member comprises a body generally in the form of a plate with flexing of the plate assisting in disuniting the wafers

***Allowable Subject Matter***

3. Claims 7 – 14, 17, 18, 36 are allowed

The prior art of record are fail to disclose the combination of a tool for disuniting two wafers, with at least one of the wafers being used in fabricating substrates for microelectronics, optoelectronics, or optics, the tool comprising two gripper members for temporarily affixing to respective opposite faces of the wafers that are united to each

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other, and a disuniting control device suitable for moving the members relative to each other, wherein the disuniting control device comprises an actuator device for positively displacing the gripper members away from each other sufficiently for inducing controlled flexing in at least one of the members to assist in disuniting the wafers, wherein at least one gripper member comprises a body generally in the form of a plate **having different degrees of elastic deformability in at least two locations.**

#### Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Nguyen whose telephone number is 571-272-1965. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ramtez Nestor, can be reached on 571 -272 -1965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jimmy Nguyen

4/27/06

  
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04/28/06